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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/715,681	11/17/2000	Yoav Raz	EMS-00202	4765

26339 7590 11/30/2004

PATENT GROUP  
CHOATE, HALL & STEWART  
EXCHANGE PLACE, 53 STATE STREET  
BOSTON, MA 02109

EXAMINER

DADA, BEEMNET W

ART UNIT	PAPER NUMBER
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2135

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/715,681	<b>Applicant(s)</b> RAZ ET AL.	
	<b>Examiner</b> Beemnet W Dada	<b>Art Unit</b> 2135	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7,22-28 and 41-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 22-28 and 41-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

1. Claims 1, 22, and 41 have been amended, claims 8-21, 29-40 and 53-62 have been cancelled on an amendment filed on 6/14/2004. Claims 1-7, 22-28 and 41-52 are pending.

### ***Response to Arguments***

2. Applicant's arguments filed 6/14/04 have been fully considered but they are not persuasive. With respect to claim 1, Applicant argues that the cited reference (Waldin et al. US 6,094,731) does not teach the features of claim 1 as amended which includes determining physical portions of a storage device that has been modified since a previous virus scan using information about the physical portions that is independent of the file structure, file system, and file types. The examiner respectfully disagrees.

Waldin et al. teaches scanning file sectors (files are divided into sectors and stored in memory) and storing a hash value of scanned file sectors [column 2, lines 10-14], and determining sectors of the stored file that has been modified since a previous virus scan [column 6, lines 37-47], and scanning the file sectors for viruses [column 6, lines 37-47]. Further Waldin et al. teaches scanning for viruses regardless of the content of the sectors [column 7, line 64 – column 8, line 8] and regardless of the file format [column 3, lines 40-45].

As discussed above, determination of modification of file sectors and scanning for viruses is performed regardless of the file format, but according to matching pre-stored hash values for a sector which is independent of file structure (for example independent of location of the file), file system (for example independent of operating systems structure, in which files are

Art Unit: 2135

named) and file types (for example independent of file name) according to Microsoft Computer Dictionary, definition of file structure, file system and file type.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-4, 22-25, 41-44 and 46-52 are rejected under 35 U.S.C. 102(e) as being anticipated by Waldin et al. (hereinafter referred to as Waldin) (U.S. Patent No. 6,094,731).

5. As per claim 1, Waldin teaches a method of scanning a storage device for viruses, comprising:

determining physical portions of the storage device that have been modified since a previous virus scan using information about the physical portions that is independent of the file structure, file system, and file types (note that determination of modification of file sectors is performed according to matching pre-stored hash values for a sector) [column 2, lines 57-64 column 6, lines 37-47, column 7, line 64 – column 8, line 8 and column 3, lines 40-45]; and

scanning at least parts of the physical portions for viruses, wherein scanning is independent of the file structure, file system and file types (scanning for viruses is performed

Art Unit: 2135

regardless of the file format, but according to matching pre-stored hash values for a sector which is independent of location, format or name of the file) [column 6, lines 43-46 ,column 7, lines 37-46, column 7, line 64 – column 8, line 8 and column 3, lines 40-45].

6. As per claim 41, Waldin teaches an anti-virus unit comprising:

means for coupling to at least one storage device [column 3, lines 47-55];

means for determining physical portions of the storage device that have been modified since a previous virus scan that is independent of the file structure, file system, and file types (note that determination of modification of file sectors is performed according to matching pre-stored hash values for a sector) [column 2, lines 57-64 column 6, lines 37-47, column 7, line 64 – column 8, line 8 and column 3, lines 40-45]; and

means for scanning at least parts of the physical portions for viruses wherein scanning is independent of the file structure, file system and file types (scanning for viruses is performed regardless of the file format, but according to matching pre-stored hash values for a sector which is independent of location, format or name of the file) [column 6, lines 43-46 ,column 7, lines 37-46, column 7, line 64 – column 8, line 8 and column 3, lines 40-45].

7. As per claims 2 and 42, Waldin teaches the method as applied above. Furthermore, Waldin teaches the method, wherein the physical portions correspond to tracks (sectors) of the storage device [column 4, lines 4-8 and figure 1].

8. As per claims 3 and 43, Waldin teaches teaches the method as applied above. Furthermore, Waldin teaches the method, wherein the physical portions correspond to sectors of the storage device [column 4, lines 4-8 and figure 1].

9. As per claims 4 and 44, Waldin teaches the method as applied above. Furthermore, Waldin teaches the method, wherein the physical portions correspond to sub-portions of the storage device [column 4, lines 4-8 and figure 1].

10. As per claims 46, 51 and 52 Waldin teaches the method as applied above. Furthermore, Waldin teaches the method, wherein said means for coupling includes means for coupling to only one storage device [column 3, lines 47-55].

11. As per claims 47-50, Waldin teaches the method as applied above. Furthermore, Waldin teaches the method, wherein said means for coupling includes means for coupling to more than one storage device [column 8, lines 20-30].

12. As per claims 22-25, the claimed steps correspond to the functions of the elements of the method claims 1-4, which has been rejected above and thus rejected with the same reason applied thereto.

### ***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2135

14. Claims 5-7, 26-28 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waldin et al. (U.S. Patent No. 6,094,731).

15. As per claims 5 and 45, Waldin teaches the method as applied above. Furthermore, Waldin teaches creating a table that is indexed according to each of the portions [fig 1, unit 10 and column 4, lines 4-8]. Waldin also teaches scanning for viruses when it has been determined that portions have been modified [column 4, lines 9-12], and calculating a new hash value upon determination of a modification [column 4, lines 58-60]. However Waldin does not explicitly teach setting a specific one of entries subject to a write operation. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a method of setting a specific one of entries subject to a write operation. This would have been obvious because Waldin teaches placing identification numbers into sectors that is scanned, every time a sector is read [column 4, lines 52-58]. Based on this teachings it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a method of setting a specific one of entries subject to a write operation into the indexed sector table thought by Waldin.

16. As per claims 6 and 7, Waldin teaches the method as applied to claim 5 above. Furthermore Waldin teaches method, wherein creating the table includes copying another table provided by the storage device [column 3, lines 50-55, figure 1, originating and recipient computers].

17. As per claims 26-28, the claimed steps correspond to the functions of the elements of the method claims 5-7, which has been rejected above and thus rejected with the same reason applied thereto.

### ***Conclusion***

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beemnet W Dada whose telephone number is (571) 272-3847. The examiner can normally be reached on Monday - Friday (9:00 am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

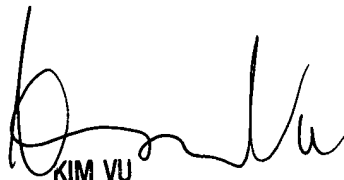


Art Unit: 2135

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Beemnet Dada

November 20, 2004



KIM VU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2135